

CDF Operations Report

Sung-Won Lee
Texas A&M University

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Store Summary

Store	start Date	time [hours]	initial lumi [E30]	int. lumi delivered [pb ⁻¹]	live lumi [pb ⁻¹]	GoodRun w/ si [pb ⁻¹]	comments
4276	7/15	21.1	83.2	2.98	2.45 82%	2.41 81%	Trigger table test, SVT test error impact eff.
4278	7/16	26.4	95.7	3.55	2.47 70%	2.05 58%	Lost few hrs at start due to problem w/ trigger table
4279	7/17	27.1	105.7	3.82	3.07 80%	3.06 80%	Silicon trip (beginning), Plug trip
4280	7/18	16.5	109.8	3.07	2.56 83%	2.56 83%	slow startup w/ high P loss, smooth running
4285	7/19	24.1	72.8	2.50	1.29 52%	1.19 48%	slow startup with SVT, COT, EVB problems SVT test
4287	7/21	0.4	109.7	0.164	0.06 35%	0.0 0%	aborted due to Booster quad dampers
Total	7/15- 7/21	115.6	93.4	16.7 pb ⁻¹	11.9pb ⁻¹ 71 %	11.3pb ⁻¹ 68 %	

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 7/15: Store 4276 starts, with an initial lumi of 83e30. The beam is well behaved. Run startup is smooth. However, there are more little problems.

The biggest down time is Halt, which accounts for 15% of lost luminosity.

- 7/16: Store 4278 starts, with an initial lumi of 96e30.
 - We are dead for the first 3 hrs because of trigger problems: 50 kHz
 L1 rate, due to new track trigger firmware and trigger table that were made "official" late Friday evening.
 - We revert back to an older trigger table, and after that, there was smooth running for the rest of the store.
- 7/17: Store 4279 starts, with an initial lumi of 106e30.
 - Slow start up (first 7 hours): silicon CAEN and FIB crate problems, and Plug HV iFIX problems (1.5 hours of DT).
 - "Halt" downtime are now a significant part of the down time

- 7/18: Store 4280 starts, with an initial lumi of 111e30.
 - remain off for the first 50 min of the store due to high proton losses.
 - since we started, the running was smooth, w/ only small problems.
 - ends with a RF anode supply trip and abort
- 7/19: CDF went into a 3 hrs controlled access
 - 1. SMXR access to understand the recent L2 DT source problem was not solved– 4 hrs access needed (in progress)
 - 2. TeV study: move our IP down 300 microns
- 7/20: Store 4285 starts, with an initial lumi of 73e30. [MANY PROBLEMS]
 - One TDC in COT06 went bad and finally had to be taken out.
 (4.5 hours DT at the start)
 - There was some SVT RC configuration confusion at the start of the
 - Solenoid tripped off because of a liquid helium flow trip.
 All detector voltages were put to standby.
 - SMXR L2 DTO problem is back and causing problems.
 "Halt" HRR downtime is at 21%.

Yesterday,

SVT folks started their very first beam test with one wedge (b0svt00) using upgrade new boards.

The test run was very successful.

- 7/21: Store 4287 starts, with an initial lumi of 110e30. The beam is not well behaved- electron lens problem (off), aborted the beam due to Booster quad dampers.
- Controlled access SMX, COT-TDC, Silicon. (IN PROGRESS NOW)